

***Remarks***

Upon entry of the foregoing amendment, claims 2-7, 10-16, 25-29, and 31-40 are pending in the application, with claims 3, 5, 7, 10, 13, 16, 27-29, 31-33, and 40 being the independent claims. Claims 2-6, 10-16, and 25-28 are indicated to be allowed. By the foregoing amendment, claims 7, 29, and 31-33 are amended herein and claim 30 is canceled. New claims 34-40 are added. Based on the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections, and that they be withdrawn.

***Rejection Under 35 U.S.C. §§ 102 and 103***

In paragraph 2, claims 7 and 29 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,614,630 to Rorden (hereinafter Rorden). Claims 30 and 33 were rejected under 35 U.S.C. § 103(a) as being obvious over Rorden. Claims 31 and 32 were objected to as being dependent on a rejected based claim, but would be allowable if rewritten in independent form. Applicants traverse below.

Claims 7 and 29 were amended to include the feature of:

*changing said first signal envelope of said local oscillator signal to a second signal envelope without changing a phase of said local oscillator signal, resulting in a shaped local oscillator signal*

At paragraph 2, the Office Action appears to rely on the phase shifter 56 of Rorden to allegedly provide the signal shaping feature. However, the phase shifter 56 only shifts the *phase* of the signal that controls the pulse generator 59, and does not change the *signal envelope* shape (e.g. amplitude shape), as recited in the claims. Further, claims 7 and 29 also recite that the signal envelope is changed *without changing the*

*phase of the local oscillator signal.* The phase shifter 56 of Rorden provides a phase shift by definition, which is contrary to (and even opposite of), the mentioned claim recitation. Accordingly, Rorden does not teach or suggest this claim feature and therefore does not anticipate claims 7 and 29, as amended. Therefore, Applicants request that the rejection under 35 U.S.C. § 102(b) be reconsidered and withdrawn and that these claims be passed to allowance.

Claim 30 has been canceled. Claims 31-32 were re-written in independent form and therefore should now be allowable. Claim 33 has been re-written in independent form and was amended to include features similar to those that were discussed herein for claims 7 and 29. Accordingly, claim 33 should now also be allowable.

New claims 34-39 depend from claim 7 and therefore are allowable for the reasons discussed herein, in addition to their own respective patentable features. New claim 40 is allowable because the sinusoidal to square or saw tooth variation is not taught or suggested by the cited art.

Accordingly, based on the discussion above, Applicants request that the rejections under 35 U.S.C. §§ 102(b) and 103 be reconsidered and withdrawn, and that claims 2-7, 10-16, 25-29, and 31-40 be passed to allowance.

### ***Conclusion***

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the

outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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